

## ABSTRACT

A multiplexer is disclosed. The multiplexer comprises a first input and a first channel coupled to the first input. The multiplexer further includes a second input and a second channel coupled to the second input. Finally, the multiplexer includes an output coupled to the first and second channels, wherein a coupling capacitance of an inactive one of the first and second channels is not coupled directly to the output. A method and system in accordance with the present invention reduces crosstalk and jitter in a multiplexer by eliminating the coupling capacitance between an inactive input and the output. In so doing, there is significantly better isolation between channels thereby minimizing the aforementioned cross-talk and jitter.